

THE LANCET

Global Health

Supplementary appendix

This appendix formed part of the original submission and has been peer reviewed. We post it as supplied by the authors.

Supplement to: Majumder MS, Mandl KD. Early in the epidemic: impact of preprints on global discourse about COVID-19 transmissibility. *Lancet Glob Health* 2020; published online March 24. [http://dx.doi.org/10.1016/S2214-109X\(20\)30113-3](http://dx.doi.org/10.1016/S2214-109X(20)30113-3).

Appendix

Table A1. *Search terms and specifications for data discovery by data source.* Exact search terms are shown with Boolean operators as specified by each data source. Relevant studies were collected through February 1, 2020, and due to indexing delays on the Google Scholar platform, the preprint servers arXiv, bioRxiv, medRxiv, and SSRN were used (in addition to Google Scholar) for study collection. Data for MediaCloud and Google Search Trends were collected From January 1, 2020 through February 9, 2020 to allow for baseline and posterior observation of news media and search interest in the topic area. Though geographic ranges of news media and search trends were specifiable, worldwide catchment was selected to ensure that international searches and media were captured in discovery.

Data Source	Search Terms	Date Range	Geographic Range
Google Scholar	<ul style="list-style-type: none"> • coronavirus reproduction • coronavirus reproductive 	February 1, 2019 – February 1, 2020	not specifiable
Preprint Servers	<ul style="list-style-type: none"> • coronavirus reproduction • coronavirus reproductive 	January 1, 2020 – February 1, 2020	not specifiable
MediaCloud	coronavirus AND (reproductive OR reproduction)	January 1, 2020 – February 9, 2020	worldwide (global)
Google Search Trends	coronavirus reproductive + coronavirus reproduction	January 1, 2020 – February 9, 2020	all media (global)

Table A2. Metadata collected for all R_0 estimates. For preprints that were revised before publication of the first relevant peer-reviewed study on January 29, the version number is indicated between parentheses as (n). When multiple R_0 estimates were presented in a single study due to the use of multiple approaches, the version number is followed by a single decimal place to indicate the approach used as ($n.n$). If a first author published more than one relevant independent study before February 1, the version number is followed immediately by an alphabetical marker (ordered by date of publication) as (nx).

ID	Date of Publication	Publication Platform	Modeling Method	Temporal Data Used	R_0 Range Presented
Majumder and Mandl (1)	23-Jan-20	SSRN (preprint)	incidence decay + exponential adjustment	confirmed case counts	point estimates
Read et al. (1)	24-Jan-20	medRxiv (preprint)	deterministic compartmental metapopulation	confirmed case counts; travel data	95% CI
Riou and Althaus (1)	24-Jan-20	bioRxiv (preprint)	stochastic simulations	none	90% high density interval
Tang et al.	24-Jan-20	SSRN (preprint)	deterministic compartmental	confirmed case counts	95% CI
Zhao et al. (1a.1)	24-Jan-20	bioRxiv (preprint)	exponential growth model	confirmed case counts	95% CI
Zhao et al. (1a.2)	24-Jan-20	bioRxiv (preprint)	exponential growth	confirmed case counts	95% CI
Majumder and Mandl (2)	26-Jan-20	SSRN (preprint)	incidence decay + exponential adjustment	confirmed case counts	point estimates
Read et al. (2)	27-Jan-20	medRxiv (preprint)	deterministic compartmental metapopulation	confirmed case counts; travel data	95% CI
Zhou et al. (1.1)	28-Jan-20	arXiv (preprint)	deterministic compartmental	confirmed case counts	point estimates
Zhou et al. (1.2)	28-Jan-20	arXiv (preprint)	deterministic compartmental	estimated case count based off of exportation events	point estimates
Li et al.	29-Jan-20	NEJM (peer-reviewed)	renewal equations	confirmed case counts	95% CI
Riou and Althaus (2)	30-Jan-20	Eurosurveillance (peer-reviewed)	stochastic simulations	none	90% high density interval
Zhao et al. (2a.1)	30-Jan-20	IJID (peer-reviewed)	exponential growth	confirmed case counts	95% CI
Zhao et al. (2a.2)	30-Jan-20	IJID (peer-reviewed)	exponential growth	confirmed case counts	95% CI
Wu, Leung, and Leung	31-Jan-20	Lancet (peer-reviewed)	Markov chain Monte Carlo	confirmed case counts	95% CrI
Zhao et al. (1b)	31-Jan-20	JCM (peer-reviewed)	simulation	confirmed case counts	95% CI

Figure A1. Search and news media interest in the basic reproduction number (R_0) associated with COVID-19 as a function of time. Indicator bars demonstrate when 11 different studies – all of which estimated the R_0 associated with COVID-19 – were made available. Data are plotted from January 23, 2020 (i.e. the date of publication for the first study) through February 1, 2020. Though not shown here, search and news media interest prior to January 23, 2020 were negligible in the topic area, and interest continued to diminish from February 2, 2020 through February 9, 2020.

